GARDNER, CARTON & DOUGLAS

1301 K STREET, N.W.
SUITE 900, EAST TOWER
WASHINGTON, D.C. 20005
(202) 408-7100
FAX: (202) 289-1504
INTERNET: gcdlawdc@gcd.com

CHICAGO, ILLINOIS

WRITER'S DIRECT DIAL NUMBER
SUSAN H.R. JONES
(202) 408-7108

ORIGINAL

August 21, 1996

MARKET FILE COPY ORIGINAL

Via Courier

RECEIVED
AUG 21 1996
FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF SECRETARY

William F. Caton
Secretary
Federal Communications Commission
1919 M Street, N.W., Room 222
Washington, D.C. 20554

Re: Opposition to Petition for Reconsideration to the Report and Order, *In the Matter of Amendments of Parts 22, 90, and 94 of the Commission's Rules to Permit Routine Use of Signal Boosters,* WT Docket No. 95-70

Dear Mr. Caton:

Transmitted herewith, on behalf of Geotek Communications, Inc., is an original and four (4) copies of an Opposition to the Petition for Reconsideration filed by TX RX Systems, Inc. ("TX RX") in the above-referenced proceeding.

A copy of this pleading has been duly served upon counsel for TX RX. If any questions should arise related to this matter, kindly contact the undersigned counsel at the direct line noted above.

Sincerely yours,

Susan H.R. Jones

Enclosure

No. of Copies rec'd 0+4
List A B C D E

165995.1

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Amendments of Parts 22, 90 and 94	)	**WT Docket No. 95-70**
of the Commission's Rules to Permit	)	**RM-8200**
Routine Use of Signal Boosters	)	

Opposition to Petition for Reconsideration

Geotek Communications, Inc. ("Geotek"), by its attorneys and in accordance with Section 1.429(f) of the rules and regulations of the Federal Communications Commission ("FCC" or "Commission"), 47 C.F.R. § 1.1.429(f), hereby files this Opposition to the Petition for Reconsideration ("Opposition") filed by TX RX Systems, Inc. ("TX RX") in the above-referenced proceeding.

Background

On May 16, 1996, the Commission adopted its Report and Order in this proceeding,[1] allowing licensees to routinely use signal boosters on Part 22 paging frequencies, VHF one-way public paging channels, on Part 90 private land mobile and paging frequencies above 150 MHz and on Part 94 MAS frequencies at 928-960 MHz without registration or licensing procedures before the Commission. Specifically with respect to Class B broadband signal boosters, defined by the Order as those signal boosters which amplify all frequencies within the booster's passband, the Commission restricted the routine use of such devices to confined areas such as tunnels, parking garages and within buildings. (Order at ¶ 17.)

---

[1] Report and Order, *In the Matter of Amendment of Parts 22, 90, and 94 of the Commission's Rules to Permit Routine Use of Signal Boosters*, WT Docket No. 95-70, ____ FCC Rcd _____ (released June 5, 1996) ("Order").

On July 19, 1996, TX RX filed a Petition for Reconsideration ("Petition") of the Order, asserting, *inter alia,* that the placement restriction for Class B signal boosters was unnecessary because: 1) "licensees are not permitted to cause interference to any authorized stations or systems and are required to correct any instances of interference" [Petition at ¶ 6]; and 2) "Class B signal boosters installed prior to adoption [of the Order have caused] few known cases of interference" [Petition at ¶ 11].

Because discussions regarding use of signal boosters and possible interference to Geotek as a commercial mobile radio service ("CMRS") licensee and provider, Geotek seeks to participate in this stage of this proceeding by filing the following Opposition.

Opposition

A. FCC Safeguards to Prevent Harmful Interference Are Not Sufficient Protection Against Unidentified Emissions.

The Order adopts regulations which will permit the routine use of signal boosters by Parts 22, 90 and 94 licensees *without* a separate authorization or notification requirement as to the location or operator of the device. [Order at ¶ 23.] Geotek supports the flexibility of the Commission's decision on this issue but notes that with no registration or notification requirement, adjacent licensees who may experience interference caused by a signal booster may not be able to readily identify the source or cause of the interference.

Because of this, Geotek asserts that the Commission's placement restriction on Class B signal boosters -- limiting the use of them to confined or enclosed places -- adds necessary protection against harmful interference. Class B signal boosters amplify *all* signals within the passband of the signal booster filter. As a result, adjacent channels are likely to be amplified in

addition to those channels intended for amplification. This could cause interference to adjacent operators or licensees. And yet, with no registration or notification requirement associated with the use of signal boosters, the adjacent operators or licensees may not be able to identify the source of interference. The Commission's interference protection rules would, in this case, be of little help.

For this reason, Geotek disagrees with TX RX who argues that the Commission's existing safeguards to prevent harmful interference are sufficient protection for adjacent licensees. The FCC must retain its placement restrictions on Class B signal boosters to ensure interference protection for nearby operators.

B. Past Patterns of Interference in a Cellular Configuration Are Not Reliable Indicators for Potential Interference to Specialized Mobile Radio ("SMR") Operators

TX RX asserts that the safeguards imposed by the Order to prevent harmful interference are unnecessary because "Class B signal boosters installed prior to adoption [of the Order have caused] few known cases of interference." [Petition at ¶ 11]. Such an argument is irrelevant and inapplicable given the broad variety of technical configurations of mobile radio service providers. TX RX suggests that because there have been "few known cases of interference" under cellular operators, the same can be anticipated once signal boosters are routinely employed in other CMRS services.

Cellular services are licensed on a geographic basis with authorization to operate on a contiguous block of frequencies on a non-site-specific configuration across a metropolitan or rural service area. Because of this, blocks of cellular frequencies are more likely to have greater geographic separation and therefore less opportunity to cause interference to adjacent channels.

SMR stations, on the other hand, are generally non-contiguous and have been traditionally licensed on a site-specific basis with minimum allowable separation between operating sites. SMR channels are thus far more vulnerable to spurious emissions than cellular channels.

TX RX's conclusion -- that because interference has not yet been a problem for cellular services, the same can be anticipated for all CMRS services -- is simply inaccurate. Geotek therefore supports the Commission's decision in the Order and requests that it uphold its safeguards to prevent harmful interference by routine use of signal boosters.

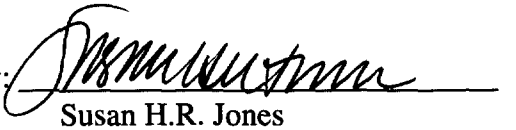
CONCLUSION

Geotek supports the Commission's decision to permit the routine use of signal booster in Part 22, 90, and 94 radio services. Geotek commends the Commission's flexible approach on this issue but urges the Commission to uphold its interference protections for Class B signal boosters.

WHEREFORE, for the foregoing reasons, Geotek urges the Commission to uphold the regulations adopted in the Order, in accordance with the opinions expressed in this Opposition.

Respectfully Submitted,

GEOTEK COMMUNICATIONS, INC.

By: 

Susan H.R. Jones
Gardner, Carton & Douglas
1301 K Street, N.W.
Suite 900, East Tower
Washington, D.C. 20005
tel. (202) 408-7100
Internet: *sjones@gcd.com*

Dated: August 21, 1996

CERTIFICATE OF SERVICE

I, Susan H.R. Jones, an attorney in the law firm of Gardner, Carton & Douglas, certify that I have this 21st day of August, 1996, caused to be sent by first-class U.S. mail, postage-prepaid, a copy of the foregoing Opposition to Petition for Reconsideration to the following:

Wayne V. Black, Esq.
Kelller and Heckman
1001 G Street, N.W.
Suite 500, West
Washington, D.C. 20001

Susan H.R. Jones